

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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DATE FILED: February 5, 2015

UNITED STATES OF AMERICA

-v-

14-cr-68 (KBF)

ROSS WILLIAM ULBRICHT,

ORDER

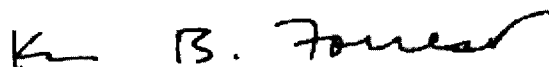
Defendant.

KATHERINE B. FORREST, District Judge:

Attached to this order as Exhibit A is the resume of Steven M. Bellovin,  
which was submitted by the Government in connection with their motion to  
preclude him from testifying as an expert. (ECF No. 170.)

SO ORDERED.

Dated: New York, New York  
February 5, 2015



KATHERINE B. FORREST  
United States District Judge

## **EXHIBIT A**

## Steven M. Bellovin

smb at cs.columbia.edu  
<http://www.cs.columbia.edu/~smb>

### Education

- 1982** Ph.D., University of North Carolina at Chapel Hill. Dissertation: *Verifiably Correct Code Generation Using Predicate Transformers*; advisor: David L. Parnas.
- 1977** M.S., University of North Carolina at Chapel Hill.
- 1972** B.A., Columbia University.

### Employment

- 2005-now** Professor of Computer Science, Columbia University.
- 2012-2013** Chief Technologist, Federal Trade Commission
- 2002-2004** Adjunct Professor of Computer Science, University of Pennsylvania.
- 1998-2004** AT&T Fellow, AT&T Labs—Research.
- 1987-1998** Distinguished Member of the Technical Staff, AT&T Bell Laboratories and AT&T Labs—Research.
- 1982-1987** Member of the Technical Staff, AT&T Bell Laboratories.
- 1977-1978** Instructor, Dept. of Computer Science, University of North Carolina at Chapel Hill.

### Honors

- 2014** Elected to the Cybersecurity Hall of Fame
- 2006** Received the 2007 NIST/NSA National Computer Systems Security Award
- 2001** Elected to the National Academy of Engineering.
- 1998** Named an AT&T Fellow.
- 1995** Received the Usenix Lifetime Achievement Award ("The Flame"), along with Tom Truscott and Jim Ellis, for our role in creating Usenet.

## Books and Chapters

- Salvatore Stolfo, Steven M. Bellovin, Angelos D. Keromytis, Sara Sinclair, Sean Smith, and Shlomo Hershkop, editors. *Insider Attack and Cyber Security: Beyond the Hacker (Advances in Information Security)*. Springer, 2008.
- Seymour E. Goodman and Herbert S. Lin, editors. *Toward a Safer and More Secure Cyberspace*. National Academy Press, 2007.
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- John L. Hennessy, David A. Patterson, and Herbert S. Lin, editors. *Information Technology for Counterterrorism: Immediate Actions and Future Possibilities*. National Academies Press, 2003.
- William R. Cheswick, Steven M. Bellovin, and Aviel D. Rubin. *Firewalls and Internet Security; Repelling the Wily Hacker*. Addison-Wesley, Reading, MA, second edition, 2003.
- *Making the Nation Safer: The Role of Science and Technology in Countering Terrorism*. National Academies Press, 2002.
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- Network security issues. In A. Tucker, editor, *CRC Computer Science and Engineering Handbook*. CRC Press, 1996.
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## Papers and Articles

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- Steven M. Bellovin, Matt Blaze, Sandy Clark, and Susan Landau. Lawful hacking: Using existing vulnerabilities for wiretapping on the Internet. *Northwestern Journal of Technology & Intellectual Property*, 12(1), 2014.

- Steven M. Bellovin, Renée M. Hutchins, Tony Jebara, and Sebastian Zimmeck. When enough is enough: Location tracking, mosaic theory, and machine learning. *NYU Journal of Law and Liberty*, 8(2):555–628, 2014.
- Sebastian Zimmeck and Steven M. Bellovin. Privee: An architecture for automatically analyzing web privacy policies. In *23rd USENIX Security Symposium (USENIX Security 14)*, pages 1–16, San Diego, CA, August 2014. USENIX Association.
- Steven M. Bellovin. Position paper: Security and simplicity. In *W3C/IAB Workshop on Strengthening the Internet Against Pervasive Monitoring (STRINT)*, March 2014.
- Vasilis Pappas, Fernando Krell, Binh Vo, Vlad Kolesniov, Tal Malkin, Seung Geol Choi, Wesley George, Angelos Keromytis, and Steven M. Bellovin. Blind seer: A scalable private DBMS. In *IEEE Symposium on Security and Privacy*, May 2014.
- Steven M. Bellovin. Mysterious checks from Mauborgne to Fabian. Technical Report CUCS-012-14, Department of Computer Science, Columbia University, April 2014. A later version will appear in *Cryptologia*.
- Steven M. Bellovin. Vernam, Mauborgne, and Friedman: The one-time pad and the index of coincidence. Technical Report CUCS-014-14, Department of Computer Science, Columbia University, May 2014.
- S. Bellovin, R. Bush, and D. Ward. Security Requirements for BGP Path Validation. RFC 7353, RFC Editor, August 2014.
- Steven M. Bellovin. Submission to the Privacy and Civil Liberties Oversight Board: Technical issues raised by the Section 215 and Section 702 surveillance programs, July 2013.
- Steven M. Bellovin, Matt Blaze, Sandy Clark, and Susan Landau. Going bright: Wiretapping without weakening communications infrastructure. *IEEE Security & Privacy*, 11(1):62–72, January–February 2013.
- Steven M. Bellovin. Why healthcare.gov has so many problems. *CNN.com*, October 15 2013.
- Steven M. Bellovin, Scott O. Bradner, Whitfield Diffie, Susan Landau, and Jennifer Rexford. Can it really work? Problems with extending EINSTEIN 3 to critical infrastructure. *National Security Journal*, 3, 2012.
- Carl Landwehr, Dan Boneh, John Mitchell, Steven M. Bellovin, Susan Landau, and Mike Lesk. Privacy and cybersecurity: The next 100 years. *Proceedings of the IEEE*, PP(99):1–15, 2012.
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- Mariana Raykova, Hang Zhao, and Steven M. Bellovin. Privacy enhanced access control for outsourced data sharing. In *Financial Cryptography and Data Security*, March 2012.
- Mariana Raykova, Ang Cui, Binh Vo, Bin Liu, Tal Malkin, Steven M. Bellovin, and Salvatore J. Stolfo. Usable secure private search. *IEEE Security & Privacy*, 10(5), September-October 2012.
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## Major Positions

|                 |   |
|-----------------|---|
| <b>2010-now</b> | Member, Computer Science and Telecommunications Board of the National Academies           |
| <b>2009-now</b> | Member, Technical Guidelines Development Committee of the Elections Assistance Commission |
| <b>2008</b>     | Co-chair, Applied Cryptography and Network Security (ACNS)                                |

|                  |  |
|------------------|--|
| <b>2006</b>      | Chair, Steps Towards Reducing Unwanted Traffic in the Internet (SRUTI)   |
| <b>2005-now</b>  | Member, Department of Homeland Security Science and Technology Advisory Committee  |
| <b>2004-2007</b> | Member, National Research Council study committee on cybersecurity research needs.   |
| <b>2002-2004</b> | Member, ICANN DNS Security and Stability Advisory Committee.   |
| <b>2002-2004</b> | Security Area co-director, Internet Engineering Task Force (IETF).   |
| <b>2002</b>      | Chair, program committee, IEEE Symposium on Security and Privacy.  |
| <b>2002</b>      | Member, Information Technology sub-committee, National Research Council study committee on science and technology against terrorism. |
| <b>2001-2003</b> | Member, ACM Advisory Committee on Security and Privacy.  |
| <b>2001</b>      | Vice-chair, program committee, IEEE Symposium on Security and Privacy.   |
| <b>2001-2003</b> | Member, National Research Council study committee on authentication technologies and their privacy implications.                     |
| <b>2000-2002</b> | Chair, IETF ITRACE working group.  |
| <b>2000</b>      | Co-chair, Usenix Security Symposium.   |
| <b>1999-2002</b> | IETF representative, ICANN Protocol Supporting Organization  |
| <b>1999-now</b>  | Co-chair, IETF SPIRITS working group.  |
| <b>1997-2001</b> | Co-chair, IETF PINT working group.   |
| <b>1996-1998</b> | Member, National Research Council study committee on information systems trustworthiness.  |
| <b>1996-2002</b> | Member, Internet Architecture Board.   |
| <b>1996</b>      | Co-chair, Usenix Security Symposium.   |
| <b>1993-1995</b> | Member, IETF IPng Directorate.   |

## **U.S. Patents**

8,798,614 Enhanced communication service for predicting and handling communication interruption

8,676,916 Method and Apparatus for Connection to Virtual Private Networks for Secure Transactions



- 8,239,531 Method and Apparatus for Connection to Virtual Private Networks for Secure Transactions
  - 8,145,793 System and Method for Distributed Content Transformation
  - 8,107,479 Method and System for Telephony and High Speed Data Access on a Broadband Access Network
  - 8,037,167 Method for Detecting Hosts behind Network Address Translators
  - 7,907,517 Routing Protocols with Predicted Outage Notification
  - 7,756,008 Routing Protocols with Predicted Outage Notification
  - 7,676,224 Enhanced Communication Service for Predicting and Handling Communication Interruption (2010).
  - 7,558,970 Full-Text Privacy-enhanced searches using encryption
  - 7,227,843 Method for reducing congestion in packet-switched networks (2007).
  - 7,051,365 Method and apparatus for a distributed firewall (2006).
  - 7,035,410 Method and apparatus for enhanced security in a broadband telephony network (2006).
  - 6,870,845 Method for providing privacy by network address translation (2005).
  - 6,665,299 Method and system for telephony and high speed data access on a broadband access network (2003).
  - 5,958,052 Method and apparatus for restricting access to private information in domain name systems by filtering information (1999).
  - 5,870,557 Method for determining and reporting a level of network activity on a communications network using a routing analyzer and advisor (1999).
  - 5,805,820 Method and apparatus for restricting access to private information in domain name systems by redirecting query requests (1998).
  - 5,440,635 Cryptographic protocol for remote authentication (1995).
  - 5,241,599 Cryptographic protocol for secure communications (1993).
- Numerous other patent applications are pending.